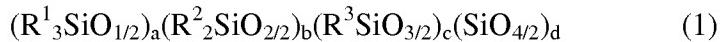


IN THE CLAIMS:

Claims 1-3. (Cancelled).

4. (Previously Presented) An optical waveguide comprising a hydrosilation-cured product of;

(A) an organopolysiloxane resin, which is represented by the average unit formula (1):

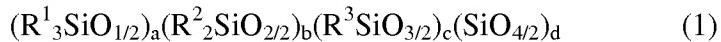


(wherein R¹, R², and R³ stand for one, two, or more kinds of monovalent hydrocarbon groups selected from monovalent aliphatic hydrocarbon groups having 1 to 6 carbon atoms and monovalent aromatic hydrocarbon groups having 6 to 10 carbon atoms, 0<a≤0.5, 0≤b<0.2, 0.3≤c<1, 0≤d≤0.4, 0≤(b+d)/(a+c)≤0.25, and a+b+c+d=1) and has three or more monovalent unsaturated aliphatic hydrocarbon groups per molecule, with not less than 10 mol% of the monovalent hydrocarbon groups being monovalent aromatic hydrocarbon groups, and

(B) an organosilicon compound having two or more silicon-bonded hydrogen atoms per molecule, with not less than 5 mol% of all the silicon-bonded monovalent substituent groups being monovalent aromatic hydrocarbon groups.

5. (Previously Presented) An optical waveguide comprising a hydrosilation-cured product of;

(A) an organopolysiloxane resin, which is represented by the average unit formula (1):



(wherein R¹, R², and R³ stand for one, two, or more kinds of monovalent hydrocarbon groups selected from monovalent aliphatic hydrocarbon groups having 1 to 6 carbon atoms and monovalent aromatic hydrocarbon groups having 6 to 10 carbon atoms, 0<a≤0.5, 0≤b<0.2, 0.3≤c<1, 0≤d≤0.4, 0≤(b+d)/(a+c)≤0.25, and a+b+c+d=1) and has three or more

monovalent unsaturated aliphatic hydrocarbon groups per molecule, with not less than 10 mol% of the monovalent hydrocarbon groups being monovalent aromatic hydrocarbon groups,

(B) an organosilicon compound having two or more silicon-bonded hydrogen atoms per molecule, with not less than 5 mol% of all the silicon-bonded monovalent substituent groups being monovalent aromatic hydrocarbon groups, and

(d2) a hydrosilation-reactive organosiloxane-based diluent.

Claims 6-7 (Cancelled)

8. (Previously Presented) The optical waveguide according to claim 4, wherein both a cladding and a core of the optical waveguide comprise a hydrosilation-cured product of component (A) and component (B), with the refractive index of the core being at least 0.1% higher than the refractive index of the cladding.

9. (Previously Presented) The optical waveguide according to claim 5, wherein both a cladding and a core of the optical waveguide comprise a hydrosilation-cured product of component (A), component (B), and component (d2), with the refractive index of the core being at least 0.1% higher than the refractive index of the cladding.

10. (Original) The optical waveguide according to claim 8, wherein the refractive index difference is regulated by making the total content of monovalent aromatic hydrocarbon groups in component (A) and component (B) used for the core higher than the total content of monovalent aromatic hydrocarbon groups in component (A) and component (B) used for the cladding.

11. (Original) The optical waveguide according to claim 9, wherein the refractive index difference is regulated by making the total content of monovalent aromatic

hydrocarbon groups in component (A), component (B), and component (d2) used for the core higher than the total content of monovalent aromatic hydrocarbon groups in component (A), component (B), and component (d2) used for the cladding.

12. (Previously Presented) The optical waveguide according to claim 4, wherein the optical waveguide has a film-like shape.

13. (Withdrawn - Currently Amended) A process for fabricating ~~an~~the optical waveguide of claim 4 using ~~the~~a curable organopolysiloxane resin composition ~~of claim 4 comprising (A), (B), and (C) a hydrosilation catalyst~~, wherein the composition is cured by heating.

14. (Withdrawn - Currently Amended) A process for fabricating ~~an~~the optical waveguide of claim 4 using ~~the~~a curable organopolysiloxane resin composition ~~of claim 4 comprising (A), (B), and (C) a hydrosilation catalyst~~, wherein the composition is applied to a substrate and cured by heating to form the hydrosilation-cured product.

15. (Withdrawn - Currently Amended) A process for fabricating ~~a slab~~the optical waveguide of claim 4, said process comprising;

applying ~~the~~a curable organopolysiloxane resin composition ~~of claim 4 comprising (A), (B), and (C) a hydrosilation catalyst~~ to a substrate and curing by heating to form the hydrosilation-cured product of (A) and (B), and

applying a second curable organopolysiloxane resin composition, whose cured product has a refractive index at least 0.1% higher than that of the composition ~~of claim 4 comprising (A), (B), and (C)~~, to the hydrosilation-cured product of the composition of claim 4 and curing the second composition by heating to form a cured product of the second composition, and

applying the curable organopolysiloxane resin composition ~~of claim 1comprising (A), (B), and (C)~~ to the cured product of the second composition and curing the composition ~~of claim 1comprising (A), (B), and (C)~~ by heating to form the hydrosilation-cured product.

16. (Withdrawn - Currently Amended) A process for fabricating ~~anthe~~ optical waveguide of claim 4, wherein ~~thea~~ curable organopolysiloxane resin composition ~~of claim 1comprising (A), (B), and (C)~~ a hydrosilation catalyst is casted into a mold having a desired inner surface shape and cured by heating to form s molding comprising the hydrosilation-cured product.

17. (Withdrawn - Currently Amended) A process for fabricating ~~anthe~~ optical waveguide of claim 4, said process comprising;

casting ~~thea~~ curable organopolysiloxane resin composition ~~of claim 1comprising (A), (B), and (C)~~ a hydrosilation catalyst into a mold having on its inner surface protrusions corresponding to a core of the optical waveguide and curing by heating to form a molding comprising the hydrosilation-cured product of (A) and (B),

removing the molding from the mold,

casting a second curable organopolysiloxane resin composition, whose cured product has a refractive index at least 0.1% higher than that of the composition ~~of claim 1comprising (A), (B), and (C)~~, into the hollow portion of the ~~cured productmolding~~ removed from the mold and curing the second composition by heating to form a cured product of the second composition, and

applying the composition ~~of claim 1comprising (A), (B), and (C)~~ on top of the cured product of the second composition and the hydrosilation-cured product of the composition of claim 1 and curing the composition ~~of claim 1comprising (A), (B), and (C)~~ by heating to form the hydrosilation-cured product.

18. (Previously Presented) The optical waveguide according to claim 5, wherein said optical waveguide has a film-like shape.

19. (Withdrawn – Currently Amended) A process for fabricating ~~an~~the optical waveguide of claim 5 using ~~the~~a curable organopolysiloxane resin composition ~~of claim 3~~comprising (A), (B), (C) a hydrosilation catalyst, and (d2), wherein the composition is cured by heating to form the hydrosilation-cured product.

20. (Withdrawn – Currently Amended) A process for fabricating ~~an~~the optical waveguide of claim 5 using ~~the~~a curable organopolysiloxane resin composition ~~of claim 3~~comprising (A), (B), (C) a hydrosilation catalyst, and (d2), wherein the composition is applied to a substrate and cured by heating to form the hydrosilation-cured product.

21. (Withdrawn – Currently Amended) A process for fabricating ~~a slab~~the optical waveguide of claim 5, said process comprising;

applying ~~the~~a curable organopolysiloxane resin composition ~~of claim 3~~comprising (A), (B), (C) a hydrosilation catalyst, and (d2) to a substrate and curing by heating to form the hydrosilation-cured product of (A), (B), and (d2), and

applying a second curable organopolysiloxane resin composition, whose cured product has a refractive index at least 0.1% higher than that of the composition ~~of claim 3~~comprising (A), (B), (C), and (d2), to the hydrosilation-cured product of the composition of claim 3 and curing the second composition by heating to form a cured product of the second composition, and

applying the composition ~~of claim 3~~comprising (A), (B), (C), and (d2) to the cured product of the second composition and curing the composition ~~of claim 3~~comprising (A), (B), (C), and (d2) by heating to form the hydrosilation-cured composition.

22. (Withdrawn – Currently Amended) A process for fabricating ~~anthe~~ optical waveguide of claim 5, wherein ~~thea~~ curable organopolysiloxane resin composition ~~of claim 3comprising~~ (A), (B), (C) a hydrosilation catalyst, and (d2) is casted into a mold having a desired inner surface shape and cured by heating to form a molding comprising the hydrosilation-cured composition.

23. (Withdrawn – Currently Amended) A process for fabricating ~~anthe~~ optical waveguide of claim 5, said process comprising;

casting ~~thea~~ curable organopolysiloxane resin composition ~~of claim 3comprising~~ (A), (B), (C) a hydrosilation catalyst, and (d2) into a mold having on its inner surface protrusions corresponding to a core of the optical waveguide and curing by heating to form a molding comprising the hydrosilation-cured product of (A), (B), and (d2),

removing the molding from the mold,

casting a second curable organopolysiloxane resin composition, whose cured product has a refractive index at least 0.1% higher than that of the composition ~~of claim 3 comprising~~ (A), (B), (C), and (d2), into the hollow portion of the ~~cured productmolding~~ removed from the mold and curing the second composition by heating to form a cured product of the second composition, and

applying the composition ~~of claim 3 comprising~~ (A), (B), (C), and (d2) on top of the cured product of the second composition and the hydrosilation-cured product of the composition of claim 3 and curing the composition ~~of claim 3 comprising~~ (A), (B), (C), and (d2) by heating to form the hydrosilation-cured product.